## (19) World Intellectual Property Organization International Bureau



# 

(43) International Publication Date 12 August 2004 (12.08.2004)

PCT

(10) International Publication Number WO 2004/067961 A3

(51) International Patent Classification7:

E21B 43/10

(21) International Application Number:

PCT/US2004/002122

- (22) International Filing Date: 26 January 2004 (26.01.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/442,938

27 January 2003 (27.01.2003) US

- (71) Applicant (for all designated States except US): ENVENTURE GLOBAL TECHNOLOGY [US/US]; 16200 A. Park Row, Houston, TX 77084 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): SHUSTER, Mark [US/US]; 19115 Prospect Ridge Lane, Houston, TX 77094 (US). WADDELL, Kevin, K. [US/US]; 11007 Sprucedale Court, Houston, TX 77070 (US). KENDZIORA, Larry [US/US]; 6518 Williams School Court, Needville, TX 77461 (US). COSTA, Scott [US/US]; 2011 Willow Point, Kingwood, TX 77330 (US).

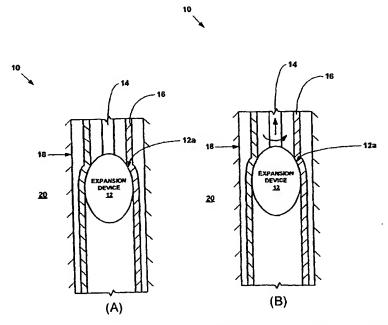
- (74) Agent: MATTINGLY, Todd; Haynes and Boone, L.L.P., 901 Main Street, Suite 3100, Dallas, TX 75202 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

[Continued on next page]

(54) Title: LUBRICATION SYSTEM FOR RADIALLY EXPANDING TUBULAR MEMBERS



(57) Abstract: A lubrication system for lubricating an interface (22) between one or more expansion surfaces (12 a) of an expansion device (12) and one or more interior surfaces (16a) of a tubular member (16) during a radial expansion of the tubular member (16) using the expansion device (12).

2004/067961 A3 IIIII

#### 

### Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report: 14 April 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/02122

A. CLASSIFICATION OF SUBJECT MATTER  IPC(7) : E21B 43/10 US CL : 166/380,384,207,242.1  According to International Patent Classification (IPC) or to both national classification and IPC  B. FIELDS SEARCHED  Minimum documentation searched (classification system followed by classification symbols) U.S.: 166/380,384,207,242.1  Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched none  Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet					
	JMENTS CONSIDERED TO BE RELEVANT				
	Citation of document, with indication, where app	propriate o	of the relevant passages	Relevant to claim No.	
Category * X,P	US 6,557,640 B1 (COOK et al) 06 May 2003 (06/05	72003), see entire document.  1-3,6-9,12-15,18- 37,65,66,68,70- 72,125-128,138,141- 145 and 147-151			
ХР	US 6,568,471 B1 (COOK et al) 27 May 2003 (27/05/2003), see entire document.			21-23,43-45,65 and 66	
Furthe	r documents are listed in the continuation of Box C.		See patent family annex.		
Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier application or patent published on or after the international filing date  "I." document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		-T-	priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone		
		-Y-			
"O" document referring to an oral disclosure, use, exhibition or other means		*&*	document member of the same pate	nt family	
p* document published prior to the international filing date but later than the priority date claimed.  Date of the actual completion of the international search		Date of mailing of the international search report  2.4 FFB 2005			
19 August 2004 (19.08.2004)		Authorized officer			
Name and mailing address of the ISA/US  Mail Stop PCT, Aun: ISA/US  Commissioner for Patents P.O. Box 1450  Alexandria, Virginia 22313-1450  Facsimile No. (703)305-3230		24 FEB 2005  Authorized officer  William P Neuder V Hora  Telephone No. 703-308-2168			

Form PCT/ISA/210 (second sheet) (January 2004)

INTERNATIONAL SEARCH REPORT	International application No. PCT/US04/02122
·	
Continuation of B. FIELDS SEARCHED Item 3:	·
EAST	

Form PCT/ISA/210 (extra sheet) (January 2004)